

Banking Economics

Lecture 5

Banking Intermediation

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(Slides adapted from Fátima Sol Murta and João Ricardo C.)

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Outline, Goals, and Main Bibliography

► Outline:

1 Banking intermediation

1.1. Definition and specificity of banking intermediation

1.2. The evolution of banking systems and the European and Portuguese banking sectors

1.3. The banking sector and the SDGs

► Goals:

Characterize the activity of banking intermediation, understand its importance and its benefits for economic agents;

Describe and relate the trends that characterize the banking sector today, particularly in Portugal and Europe.

► Main Bibliography:

Casu, B., Girardone, C., & Molyneux, P. (2006). *Introduction to Banking*. FT Prentice Hall. (Chapter 2)

Matthews, K., & Thompson, J. (2005). *The Economics of Banking* (3rd ed.). John Wiley & Sons. (pages 1-21)

3) Globalization

- ▶ **Banking globalization parallels financial system globalization and the rise of multinational corporations.** This is because the broad process of globalization creates the **conditions** for **banking** to become **global**.

Factors Driving Banking Globalization:

- A. The rise of multinational corporations;
- B. Relaxation of capital controls;
- C. Creation and deepening of supranational economic areas (e.g., harmonization in regulation within the EU: the Single Market and Second Banking Directive)
- D. Securitization.

3) Globalization (cont.)

Total foreign claims (\$bn)					
<i>Country</i>	<i>1983</i>	<i>1988</i>	<i>1993</i>	<i>1998</i>	<i>2003*</i>
France	70.8	97.8	115.5	189.7	120.3
Germany	33.7	93.2	179.6	399.5	250.4
Japan	61.1	338.9	405.9	295.9	1201.5
Switzerland	16.7	36.5	51.8	83.9	147.3
UK	85.8	99.4	184.9	337.7	1568.5
USA	21.4	162.3	179.3	305.0	788.6

Figure 1. Foreign claim position of the major banking economies since 1983.

Source: Matthews and Thompson (2005, p.8)

Summary

- ▶ So far, the picture we have painted follows these lines:
- ▶ Banks and their activities have been shaped by a trend of **deregulation**, granting them **greater commercial freedom** to engage in **diverse activities** (e.g., providing **varied financial services**, in line with the **universal banking model**) across **different economies**, not limited to their home country.
- ▶ **Financial services and products** have undergone **significant changes** driven by continuous **financial innovation**.

Consequences

- ▶ Embedded in this scenario, traditional banks began facing intensified competition on both sides of their balance sheets.
- On the asset side, they contend with competition from specialist consumer credit institutions, non-bank financial intermediaries (NBFIs), and other players.
- On the liability side, they face pressure from mutual funds and a diverse range of liquid savings products offered by NBFIs. 6

Banks' Profitability

- The forces of **competition** unleashed by **deregulation** and **globalization** trends have taken a **toll** on **banks' profitability**.

$$ROA \text{ (Return on Assets)} = \frac{\text{net income after taxes}}{\text{total assets}} * 100$$

Return on assets (%)						
Country	1979	1984	1989	1994	1999	2001
France	0.3	0.2	0.3	0.0	0.5	0.7
Germany	0.5	0.7	0.7	0.5	0.4	0.2
Japan	0.4	0.5	0.5	0.1	0.0	-0.7
Switzerland	0.6	0.7	0.7	0.4	0.9	0.5
UK	1.8	0.9	0.2	1.1	1.4	1.1
USA	1.1	0.8	0.8	1.7	2.0	1.8

Figure 2. ROA of large commercial banks across different countries. **Source:** Matthews and Thompson (2005, p.9)

Banks' Profitability (cont.)

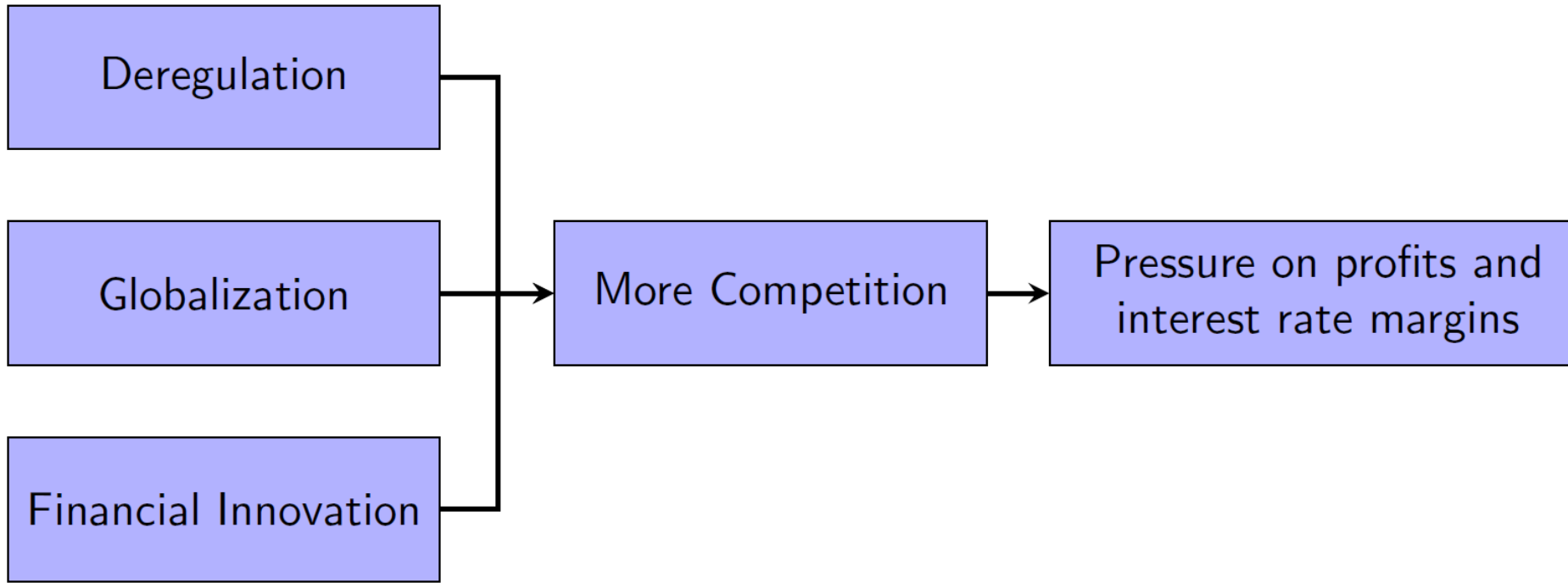
- The forces of **competition** unleashed by **deregulation** and **globalization** trends have taken a **toll** on **banks' profitability**.

Net interest margin = Net interest income/Interest-earning assets

Net interest margins						
Country	1979	1984	1989	1994	1999	2001
France	2.6	2.5	2.0	1.4	0.7	1.0
Germany	2.0	2.5	2.0	2.2	1.5	1.2
Japan	1.8	1.2	1.0	1.3	1.4	1.3
Switzerland	1.1	1.3	1.4	1.4	0.9	1.1
UK	3.9	3.0	3.2	2.4	1.2	1.8
USA	1.3	3.3	3.5	3.8	3.5	3.4

Figure 3. Net interest margins of large commercial banks across different countries;
Source: Matthews and Thompson (2005, p.10).

In synthesis ...



In response to **heightened competition** and **low profitability**, banks have:

1. **Restructured** (downsized and consolidated through mergers and acquisitions);
2. **Diversified.**

Banking System Restructuration

- ▶ To counteract low profitability, the banking system restructured to reduce operational costs by:
- ▶ Downsizing, evident in branch closures and staff reductions;
- ▶ Consolidating through mergers and acquisitions to exploit economies of scale and scope, extend geographical reach, and gain other advantages;
- ▶ Increasing productivity by adopting new technology (e.g., online banking).

Banking System Restructuration (cont.)

Operational costs (%) as a percentage of total assets

<i>Country</i>	<i>1979</i>	<i>1984</i>	<i>1989</i>	<i>1994</i>	<i>1999</i>	<i>2001</i>
France	1.2	2.0	1.6	1.5	1.2	1.6
Germany	2.0	2.2	1.2	1.9	1.7	1.7
Japan	1.4	1.1	0.8	1.0	1.0	0.9
Switzerland	1.5	1.4	1.6	1.8	1.4	1.5
UK	3.6	3.2	3.3	2.6	1.9	1.8
USA	2.6	3.0	3.4	3.8	3.8	3.6

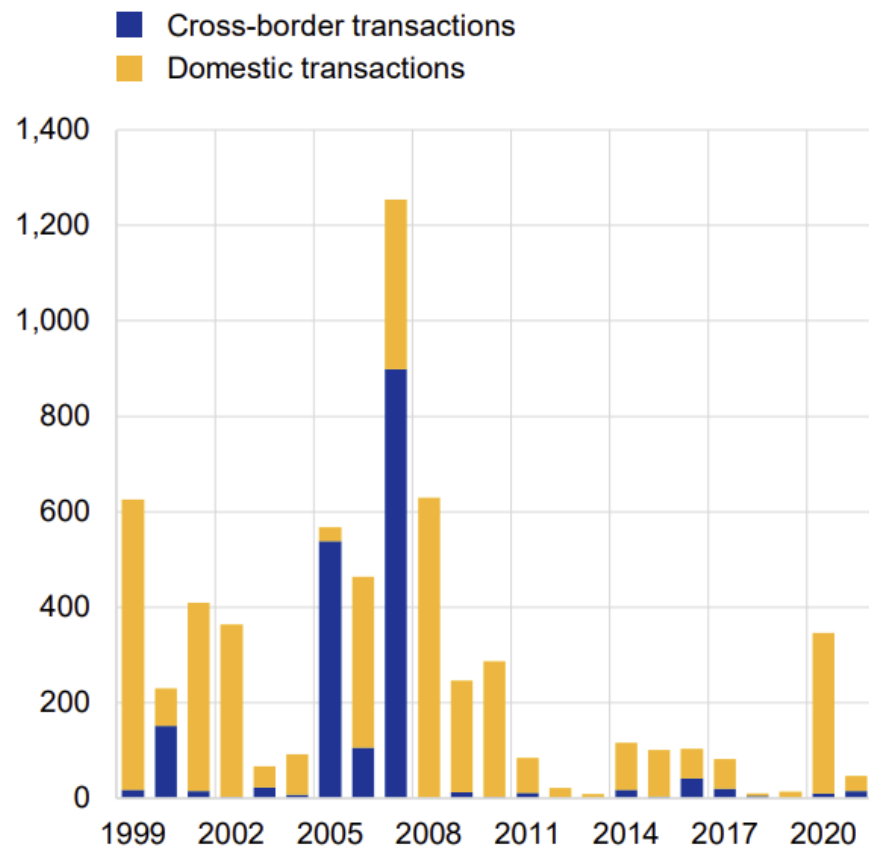
Figure 4. The evolution of banks' operational costs across different countries.

Source: Matthews and Thompson (2005, p.13)

Banking System Restructuration (cont.)

a) Value of M&A in the euro area

(EUR billions)



b) Number of transactions in the euro area

(number)

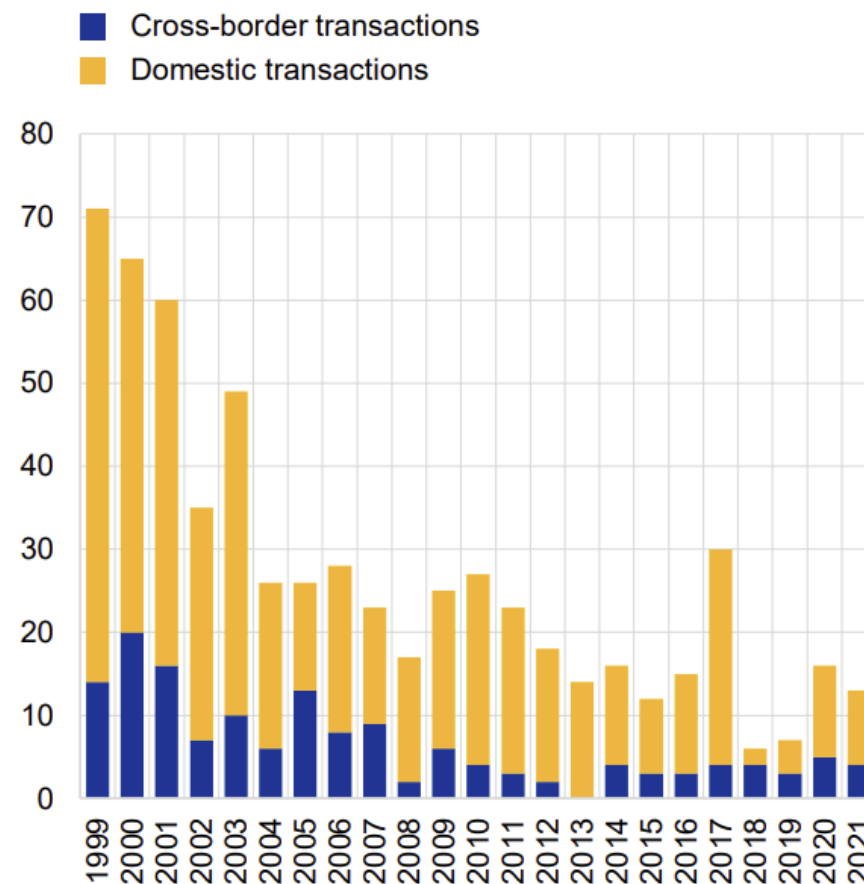


Figure 5. Value and number of bank M&A in the euro area (1999-2021)

Source: ECB (2022, p.33)

Banking System Restructuration (cont.)

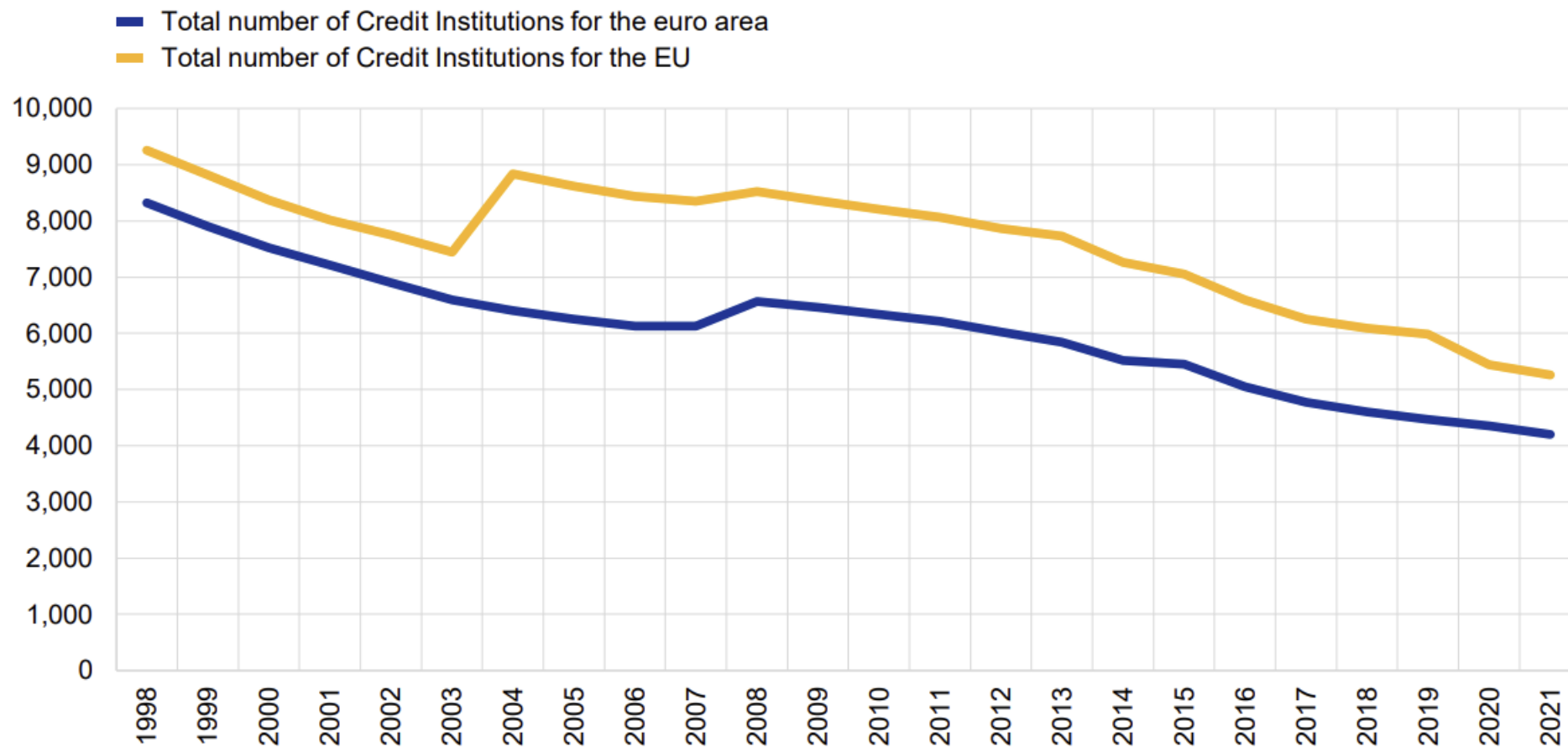


Figure 6. Number of credit institutions (1998-2021).

Source: ECB (2022, p.33)

Banking System Diversification

- ▶ Furthermore, banks have diversified into non-intermediary financial services, ranging from investment brokerage to insurance. One of the results of this has been the spectacular growth in Off-balance-sheet (OBS) activity.
- ▶ **Off-balance-sheet activities:** Banks conduct many fee-related activities off the balance sheet. OBS activities include trust and advisory services, brokerage services and issuing various types of guarantees (such as letters of credit), which often have a strong insurance underwriting element and making future commitments to lend.
- ▶ By undertaking OBS activities, banks hope to earn additional fee income to complement declining margins or spreads on their traditional lending business.

1.3. The banking sector and the SDGs

- ▶ The Paris climate change agreement and the United Nations 2030 Agenda for Sustainable Development, which were finalized in 2015, represent universal visions and ambitious policy agendas to achieve the objectives of sustainability and climate change mitigation.
- ▶ The United Nations Sustainable Development Goals (SDGs) list 17 targets as the blueprint for achieving a better and more sustainable future. These address challenges such as poverty, inequality, peace, justice and environmental issues.
- ▶ In line with these visions, since 2018 the European Commission has developed a comprehensive policy agenda on sustainable finance.

1.3. The banking sector and the SDGs

- ▶ Banks and other financial firms are expected to play a crucial role in sustainability agendas. As financial intermediaries, banks must assess the impact of their credit decisions on sustainability.
- ▶ What environmental consequences do banks face in their operations?
- ▶ Banks' activities are linked to two types of environmental impacts:
 - ❖ Internal impacts;
 - ❖ External impacts.

Types of Environmental Impacts of Banks' Activities

- ▶ **Internal impacts:** These refer to the resources consumed within the bank, such as water, energy, and paper. Among these, energy consumption is the most significant.
- ▶ **Mitigating** these impacts involves measures such as adopting energy-saving practices, utilizing renewable energy, switching to biodegradable bank cards and upgrading to more efficient equipment.

Types of Environmental Impacts of Banks' Activities (cont.)

- ▶ **External Impacts:** related to the **products/services** banks offer (credit). While bank products and services themselves do not inherently have environmental impacts, unlike products in other sectors, the **use of credit** can **significantly contribute** to **environmental issues**. **Borrowers** may have a strong environmental impact, such as **greenhouse gas emissions** and **natural resource depletion**.
- ▶ Banks can choose to finance projects with **beneficial environmental impacts**, including those focused on **climate change mitigation** (e.g., **Green Bonds**). They can also implement **interest rate differentiation**, offering **lower rates** to **businesses** with **lower environmental impact**.
- ▶ **Climate change** contributes to the **increasing frequency** of **extreme weather events**, leading to **asset devaluation** and **significant risks** for the **financial sector**, particularly for **banks** and **insurance companies**.

The Portuguese case

The Portuguese banking sector has a significant share of credit associated with firms exposed to risks stemming from water stress, heat stress and wildfires.

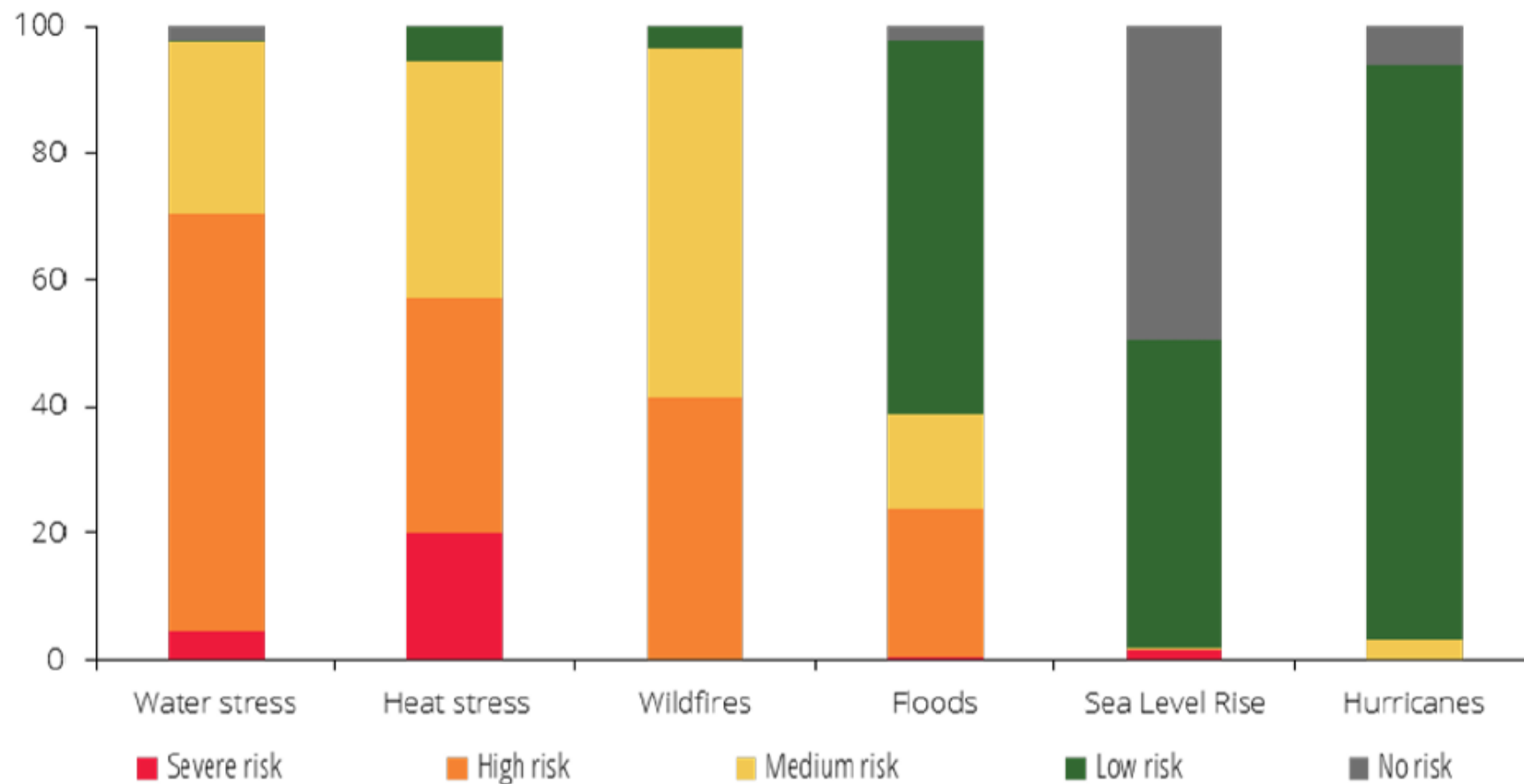


Figure 7. Banking sector's exposure to physical risks through credit granted to firms - September 2023 | As a percentage of total credit to firms.
Source: Banco de Portugal (2024, p.27).

1.3. The banking sector and the SDGs (cont.)

- But the **sustainability** of banks (and companies in general) doesn't just depend on the **environmental** impact of their activity. **Banks** (and other companies) must incorporate **ESG practices**.

E- Environmental

S-Social

G-Governance

ESG Practices

- ▶ **Environmental:** Reflects the bank's impact on climate change, including financing environmentally friendly projects, assessing exposure to environmental risks, and efforts to reduce resource consumption, greenhouse gas emissions and increase the use of renewable energy.
- ▶ **Social:** Considers the bank's human capital and its treatment of employees, including training practices, job and health protection, working conditions, equality, diversity, and inclusion. Externally, it evaluates the bank's relationships with clients, customer satisfaction, unions, protection of minorities, and its social initiatives supporting the community.
- ▶ **Governance:** Evaluates leadership practices, transparency, board structure, executive compensation policies, risk supervision, and internal controls. Good governance practices are linked to better risk management, accountability, long-term sustainability, and ethical decision-making.

1.3. The banking sector and the SDGs (cont.)

- ▶ Central banks globally are addressing climate change and sustainability challenges too. In July 2021, the ECB revised its monetary policy strategy, acknowledging climate change's profound impact on price stability. As part of this strategy, the ECB aims to:
 - a) Develop indicators to measure and assess the carbon footprint and risks posed by financial institutions;
 - b) Integrate climate considerations into collateral eligibility and valuation frameworks.
- ▶ These initiatives underscore the pivotal role of central banks in fostering sustainable economic practices.

1.3. The banking sector and the SDGs (cont.)

“Sustainable finance refers to the process of taking environmental, social and governance (ESG) considerations into account when making investment decisions in the financial sector, leading to longer-term investments in sustainable economic activities and projects.” (European Commission)

(€ billions)

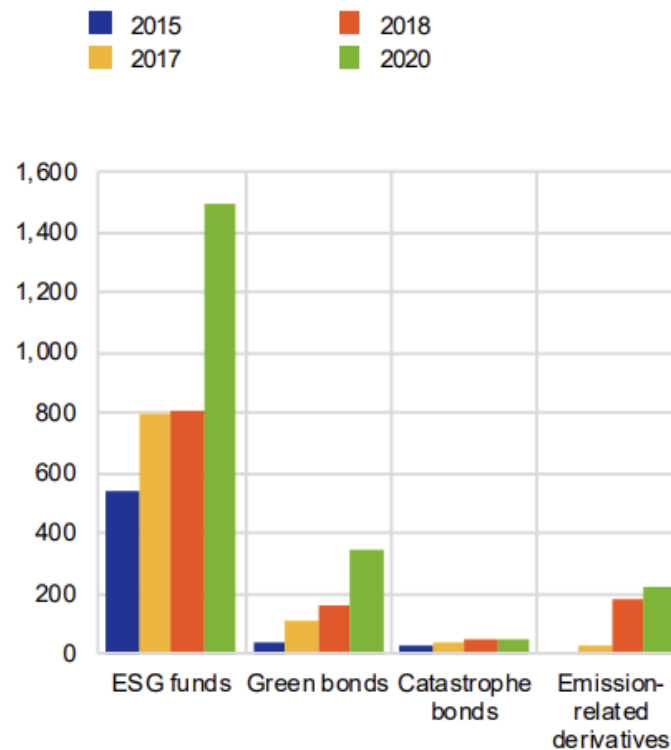


Figure 8. Outstanding amounts of different green instruments.
Source: ECB (2021, p.110)

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